

WHAT IS CLAIMED IS:

1. A mobile station service method in a mobile communication system, comprising:  
determining whether a frequency exists on each of a CDMA Channel List and an  
Extended CDMA Channel List when a service frequency of a base station is changed;  
copying a frequency allocated to the Extended CDMA Channel List to the CDMA  
Channel List if the frequency is determined not to exist on the CDMA Channel List; and  
copying a frequency allocated to the CDMA Channel List to the Extended CDMA  
Channel List if the frequency is determined not to exist on the Extended CDMA Channel List.
2. The method of claim 1, further comprising transmitting the CDMA and Extended  
CDMA Channel Lists to a mobile terminal.
3. The method of claim 1, wherein the mobile terminal is one of a second generation  
mobile terminal and a third generation mobile terminal.
4. The method of claim 1, further comprising transmitting the CDMA Channel List by  
including in the CDMA Channel List the frequency allocated to the Extended CDMA Channel  
List if the frequency exists on both of the CDMA and Extended CDMA Channel Lists.

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5. The method of claim 1, wherein copying the frequency allocated to the Extended CDMA Channel List to the CDMA Channel List comprises:

determining whether the CDMA Channel List has been changed;

determining whether a prescribed frequency exists on the CDMA Channel List when the CDMA Channel List is changed;

determining whether the prescribed frequency exists on the Extended CDMA Channel List when the prescribed frequency is determined not to exist on the CDMA Channel List; and

copying the prescribed frequency allocated to the Extended CDMA Channel List to the CDMA Channel List when the prescribed frequency exists on the Extended CDMA Channel List.

6. The method of claim 1, wherein copying the frequency allocated to the CDMA Channel List to the Extended CDMA Channel List comprises:

determining whether the Extended CDMA Channel List has been changed;

changing items of the CDMA Channel List such that items of the Extended channel list are changed on the CDMA Channel List when the Extended CDMA Channel List is changed;

determining whether the prescribed frequency exists on the changed Extended CDMA Channel List;

determining whether the prescribed frequency exists on the CDMA Channel List when the prescribed frequency is determined not to exist on the Extended CDMA Channel List; and

copying the prescribed frequency allocated to the CDMA Channel List to the Extended CDMA Channel List when the prescribed frequency exists on the CDMA Channel List.

7. A mobile station service method in a mobile communication system, comprising:
- determining whether a CDMA Channel List has been changed;
  - determining whether a prescribed frequency exists on the CDMA Channel List when the CDMA Channel List is determined to have been changed;
  - determining whether the prescribed frequency exists on the Extended CDMA Channel List when the prescribed frequency fails to exist on the CDMA Channel List; and
  - copying the prescribed frequency allocated to the Extended CDMA Channel List to the CDMA Channel List when the prescribed frequency exists on the Extended CDMA Channel List.

8. The method of claim 7, further comprising transmitting the CDMA Channel List to which the frequency has been copied to a mobile terminal.

9. The method of claim 7, further comprising transmitting the changed CDMA Channel List as is to a mobile terminal if the prescribed frequency exists on the CDMA Channel List.

10. A mobile station service method in a mobile communication system, comprising:
- determining whether an Extended CDMA Channel List has been changed;

changing items of a CDMA Channel List in a manner identical to the Extended channel if it is determined that the Extended CDMA Channel List has been changed;

determining whether a prescribed frequency exists on the changed Extended CDMA Channel List;

determining whether the prescribed frequency exists on the CDMA Channel List when the frequency fails to exist on the Extended CDMA Channel List; and

copying the prescribed frequency allocated to the CDMA Channel List to the Extended CDMA Channel List when the prescribed frequency exists on the CDMA Channel List.

11. The method of claim 10, further comprising transmitting the Extended CDMA Channel List to which the frequency is copied to a mobile terminal.

12. The method of claim 11, wherein the mobile terminal is one of a second generation mobile terminal and a third generation mobile terminal.

13. The method of claim 10, further comprising transmitting the changed Extended CDMA Channel List as is to a mobile terminal if the prescribed frequency exists on the Extended CDMA Channel List.

14. A method of managing frequency allocations in a mobile communication system, comprising:

updating a CDMA Channel list to include a frequency allocated on an Extended CDMA Channel list;

updating the Extended CDMA Channel list to include a frequency allocated to the CDMA Channel list; and

transmitting each of the CDMA Channel list and the Extended CDMA Channel list to at least one mobile terminal.

15. The method of claim 14, wherein if an allocated frequency is removed from the channel list from which the allocated frequency originated, the other channel list is updated to remove the allocated frequency.

16. The method of claim 14, wherein the at least one mobile terminal is one of a second generation mobile terminal and a third generation mobile terminal.

17. A communication system, comprising:

a base station configured to allocate frequencies of a CDMA channel list and an Extended CDMA channel list; and

at least one mobile terminal configured to receive one of the CDMA channel list and the Extended CDMA channel list according to a terminal type, wherein the terminal type is one of a second generation (2G) terminal and a third generation (3G) terminal, and wherein the base station is configured to copy frequencies allocated on the CDMA channel list to the Extended

CDMA channel list, and to copy frequencies allocated on the Extended CDMA channel list to the CDMA channel list.

18. The system of claim 17, wherein if the Extended CDMA channel list is changed, the base station is configured to update the CDMA channel list to reflect the change to the Extended CDMA channel list.

19. The system of claim 17, wherein if the CDMA channel list is changed, the base station is configured to update the Extended CDMA channel list to reflect the change to the CDMA channel list.

20. The system to claim 17, wherein the 2G terminal is configured to receive the CDMA channel list and the 3G terminal is configured to receive the Extended CDMA channel list.

21. A method of supporting a mobile station service in a mobile communication system comprising ;

transmitting a Synchronization Channel Message on a Synchronization Channel in a frequency which is related to a service capability of the base station.

transmitting a CDMA Channel List and an Extended CDMA Channel List on a Paging Channel in the frequency

22. The method of 21, further comprising the mobile station finally setting a service according to one of the CDMA Channel List and an Extended CDMA Channel List

23. The method of 21, wherein the Extended CDMA Channel List includes an information related to the service capability of the base station which is not transmitted on Synchronization Channel